

Atty Docket No. 022193-042810US

PTO FAX NO.:

(703) 872-9306

ATTENTION:

O.I.P.E.

TELEPHONE NO.:

(703) 308-1202

Group Art Unit Unassigned

OFFICIAL COMMUNICATION

FOR THE ATTENTION OF THE O.I.P.E.

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following documents in re Application of Michael Peters, Application No. 10/782,386, filed February 18, 2004 for METHOD AND CIRCUIT FOR INCREASING THE MEMORY ACCESS SPEED OF AN ENHANCED SYNCHRONOUS SDRAM are being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Document(s) Attached

- 1. Transmittal Form (PTO/SB/21)
- 2. Revocation of Power of Attorney with New Power of Attorney and Change of Correspondence Address
- 3. Statement Under 37 CFR 3.73(b) with copy of Assignment

Number of pages being transmitted, including this page: 11

Dated: May 21, 2004

Michael Nowak

PLEASE CONFIRM RECEIPT OF THIS PAPER BY RETURN FACSIMILE AT (415) 576-0300

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, Eighth Floor San Francisco, CA 94111-3834 Telephone: 415-576-0200

Fax: 415-576-0300

60223149 v)

PTO/SB/21 (08-03)

			Appli	cation Number	10/	782,386	
TRANSMITTAL FORM				Date	+	February 18, 2004	
			First Named Inventor		+	ters, Michael	
(to be used for all o	отеspondence after	Initial filing)	Art U	nit	+-	assigned	
				iner Name	+-	assigned	
Total Number of Pa	ges In This	10		ney Docket Number	╅──		
Submission			<u></u>			2193-042810US	
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Fee Transmittat	Form	New Po	ower of a	Power of Attorney with Attorney and Change of Se Address		After Allowance Communication to Group	
Fee Attact	ned	Statem copy of	ent Und Assign	er 37 CFR 3.73(b) with ment		Appeal Communication to Board of Appeals and Interferences	
☐ Amendment/Re	ply	Petition				Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
After Final		Petition Provision		vert to a Dication		Proprietary Information	
Affidavits/o	lectaration(s)	Power of Change	of Attorn	ey, Revocation espondence Address		Status Letter	
Extension of Time Request			Terminal Disclaimer		Ø	Other Enclosure(s) (please identify below):	
Express Abandonment Request		Reques	Request for Refund		Facs	simile Cover Sheet	
<u>-</u>		CD, Nu	Number of CD(s)				
Information Disclosure Statement				<u> </u>			
Certified Copy of Document(s)	Priority	Remark	us ·	The Commissioner is a Account 20-1430.	uthori	zed to charge any additional fees to Deposit	
Response to Mis	sing Parts/ ication	A					
Response t	o Missing Parts FR 1.52 or 1.53	. •					
· ·	SIGN	ATURE OF	APPI	CANT, ATTORNEY,	OP A	CENT	
Firm	Townsend and To	ownsend an	d Crew	LLP	<u> </u>	OLIT	
or Individual	Patrick R. Jewik	1	_	Reg. No	. 40,4	58	
Signature					1		
Date May 21, 2004							
		CE	RTIFIC	ATE OF MAILING			
I hereby certify that thi May 21, 2004	s correspondence is				Trader	nark Office, Fax No. (703) 872-9306 on	
Typed or printed name	Michael Nowak						
Signature	May	1/1			Date	May 21, 2004	

60223099 v1

PTO/SB/82 (09-03)

REVOCATION OF POWER OF ATTORNEY WITH NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

		_
Application Number	10/782,386	
Filing Date	February 18, 2004	
First Named Inventor	Peters, Michael	
Art Unit	Unessigned	
Examiner Name	Unassigned	
Attorney Docket Number	022193-042810US	

I hereby revoke al	l previous p	owers of attorns	y given in	the abo	ve-Identi	ied app	ication:	941	
A Power of Attorney is submitted herewith.									
OR `		4		÷					
I hereby appoin	☑ I hereby appoint the practitioners associated with the Customer Number:								
Please cha	nge the corre	espondence addn	ess for the	above-Id	entified a	oplication	ı to:		
	The address associated with 20350 Customer Number:								
OR							2 20		
☐ Firm <i>or</i> Individual Name		·			*				
Address	· 			•			·	· · · · · · · · · · · · · · · · · · ·	
Address									
City			e 0	State		ZiP			
Country						1			
Telephone				Fax					
l am the: ☐ Applicant									
Assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed, (Form PTO/SB/96)									
SIGNATURE of Applicant or Assignee of Record									
Name	me Julia Ceffalo								
Signature								1	
Date	19M	an roots	-	ephone					
more than one signature	NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.								
☐ *Total of	forms are subm	nitted.							

60212432 v1

PTO/SB/96 (08-03)

Attorney Docket No. 022193-042810US

STATEMENT UND	ER 37 CFR 3,73(b)
Applicant/Patent Owner: Michael Peters	
Application No./Patent No.: 10/782,386 Fi	led/Issue Date: February 18, 2004
Entitled: METHOD AND CIRCUIT FOR INCREASING T SYNCHRONOUS SDRAM	THE MEMORY ACCESS SPEED OF AN ENHANCED
Purple Mountain Server LLC a Delaware of	noiterogra
	gnee, e.g., corporation, partnership, university, government agency, etc.)
states that (t is:	
1. \(\square\) the assignee of the entire right, title, and interest;	
 an assignee of less than the entire right, title and The extent (by, percentage) of its ownership inter 	rest ts%
in the patent application/patent identified above by virtue of eith	her:
A. An assignment from the inventor(s) of the patent applicate recorded in the United States Patent and Trademark Off thereof is attached.	ation/palent identified above. The assignment was fice at Reel, Frame or for which a copy
OR	
A chain of title from the inventor(s), of the patent application shown below:	tilon/patent identified above, to the current assignee as
1. From: Michael Peters	To :Enhanced Memory Systems, Inc.
The document was recorded in the United States P	atent and Trademark Office at
Reel <u>011857</u> , Frame <u>0268</u> , or for which a copy ther	eof is attached.
O. Francisco Mariana Suntana da	
 From: Enhanced Memory Systems, Inc. The document was recorded in the United States P 	To: Purple Mountain Server LLC
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	То :
The document was recorded in the United States P Reel Frame or for which a copy ther	atent and Trademark Office at eof is attached.
☐ Additional documents in the chain of title are listed	on a supplemental sheet.
□ Copies of assignments or other documents in the chain of t	itto see offeebed
[NOTE: A separate copy (i.e., the original assignment documents be submitted to Assignment Division in accordance with recorded in the records of the USPTO, See MPEP 302.81	ment or a true copy of the original document)
The undersigned (whose title is supplied below) is authorized to	o act on behalf of the assignee.
19 May 2004	Julia Ceffalo
Date	Typed or printed name
W	AMM
Telephone number	Signature
	Authorized Person Title

60214472.v1

Exhibit B

ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Ramtron International Corporation and Enhanced Memory Systems, Inc., each having offices at 1850 Ramtron Drive, Colorado Springs, Colorado 80921 (together, "Assignor"), do hereby sell, assign, transfer and convey unto Purple Mountain Server LLC, a Delaware limited liability company, having an office at 171 Main Street, #271, Los Altos, California 94022 ("Assignee") or its designees, all of Assignor's right, title and interest in and to: the patent applications and patents listed below, any patents, registrations, or certificates of invention issuing on any patent applications listed below, the inventions disclosed in any of the foregoing, any and all counterpart United States, international and foreign patents, applications and certificates of invention based upon or covering any portion of the foregoing, and all reissues, re-examinations, divisionals, renewals, extensions, provisionals, continuations and continuations-in-part of any of the foregoing (collectively "Patent Rights"):

Patent or Application No.	Country	Filing Date	Assignor	<u>Title</u> <u>Inventor(s)</u>
Pat. 5,104,822 (RAM 317)	U.S.	07/30/1990	RAM	Method For Creating Self-Aligned, Non-Patterned Contact Areas And Stacked Capacitors Using The Method Buffer
Pat. 5,162,890 (RAM 317 DIV)	U.S.	04/05/1991	RAM	Stacked Capacitor With Sidewall Insulation Butler
Pat. 2673615 (RAM 317 JPN)	Japan	07/30/1991	RAM	Method For Creating Self-Aligned, Non-Patterned Contact Areas And Stacked Capacitors Using The Method Butler
Pat. 5,170,242 (RAM 319 CON)	U.S.	05/10/1991	RAM	Reaction Barrier For A Multilayer Structure In An Integrated Circuit Stevens, Mackawa
Pat. 2075540 (RAM 319 JPN)	Japan	07/13/1990	RAM	Reaction Barrier For A Multilayer Structure In An Integrated Circuit Stevens, Mackawa
Pat. 5,075,817 (RAM 320)	U.S.	6/22/1990	RAM	Trench Capacitor For Large Scale Integrated Memory Butler
Pat. 2089169 (RAM 320 JPN)]span	06/21/1991	RAM	Trench Capacitor For Large Scale Integrated Memory Butler

WDE - 80412/0161 - 204101 v2



Pat 5,610,099	U.S.	06/28/1994	RAM	Process For Fabricating Transistors Using Composite Nitride Structure
(RAM 321)			=	Stevens, Bailey, Taylor
Pat. 5,043,790	U.S.	04/05/1990	RAM	Scaled Self Aligned Contacts Using Two Nitride Process
(RAM 322)	,			Builer
Pat. 5,216,281	U.S.	08/26/1991	RAM	Sealed Self Aligned Contact Incorporating A Dopant Source
(RAM 322 CIP)			*	Butler
Pat. 2005865 (RAM 322 JPN)	Japan	04/05/1991	RAM	Sealed Self Aligned Contacts Using Two Nitride Process
(222,222,22)				Butler
Pat. 5,134,310 (RAM 324)	U.S.	01/23/1991	RAM	Current Supply Circuit For Driving High Capacitance Load In An Integrated Circuit
(-		Mobley, Eaton
Pat. 2932122 (RAM 324 JPN)	Japan	01/23/1992	RAM	Current Supply Circuit For Driving High Capacitance Load In An Integrated Circuit
				Mobley, Eaton
Pat. 5,117,177 (RAM 325)	U.S.	01/23/1991	RAM	Reference Generator For An Integrated Circuit Eaton
Pat 3106216 (RAM 325 JPN)	Japan	01/23/1992	RAM	Reference Generator For An Integrated Circuit Eaton
Pat. 5,255,222 (RAM 326)	U.S.	01/23/1991	RAM	Output Control Circuit Having Continuously Variable Drive Current Eaton
Pat. 3136424 (RAM 326 JPN)	Japan	01/22/1992	RAM	Output Control Circuit Having Continuously Variable Drive Current
•				Eaton
Pat. 5,699,317 (RAM 343 CIP)	U.S.	10/06/1994	EMS	Enhanced Dram With All Reads From On-Chit Cache And All Writes To Memory Array
				Mobley, Sartore, Carrigan, Jones
Pat. 5,721,862 (RAM 343 CON)	U.S.	06/02/1995	EMS	Enhanced Dram With Single Row SRAM Cach For All Device Read Operations
				Mobley, Sartore, Carrigan, Jones
Pat 69324508.5 (RAM 343 DE)	Germany	01/14/1993	EMS	Edram With Embedded Registers Mobley, Sartore, Carrigan, Jones

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Pat. 5,887,272 (RAM 343 DIV)	U.S.	07/03/1997	EMS	Enhanced Dram With Embedded Registers Mobley, Sartore, Carrigan, Jones
Pat. 6,347,357 (RAM 343 DIV/CON)	us.	10/30/1998	EMS	Enhanced Dram With Embedded Registers Mobley, Sartore, Carrigan, Jones
App. 09/962,287 (RAM 343 DIV/CN2)	U.S.	09/24/2001	EMS	Enhanced Dram With Embedded Registers Mobley, Sartore, Carrigan, Jones
Pat. 2851503 (RAM 343 JPN)	Japan	01/21/1993	EMS	EDRAM Having A Dynamically-Sized Cache Memory And Associated Method Mobley, Sartore, Carrigan, Jones
Pat. 5,566,318 (RAM 381)	U.S.	08/02/1994	RAM	Circuit With A Single Address Register That Augments A Memory Controller By Enabling Cache Reads And Page-Mode Writes
	<u> </u>			Joseph
Pat. 5,835,442 (RAM 393)	U.S.	03/22/1996	EMS	EDRAM With Integrated Generation And Contr Of Write Enable And Column Latch Signals An Method For Making Same
				Joseph, D.N. Heisler, D.J. Heisler
Pat. 5,991,851 (RAM 417)	u.s.	05/02/1997	EMS	Enhanced Signal Processing Random Access Memory Device Utilizing A Dram Memory Arra Integrated With An Associated SRAM Cache An Internal Refresh Control
		· · · · · · · · · · · · · · · · · · ·	<u> </u>	Alwais, Mobley
Pat. 5,901,100 (RAM 418)	U.S.	04/01/1997	RAM	First-In, First-Out Integrated Circuit Memory Device Utilizing A Dynamic Random Access Memory Array For Data Storage Implemented In Conjunction With An Associated Static Random Access Memory Cache
				Taylor
Pat. 6,072,741 (RAM 418 CIP)	U.S.	03/11/1999	RAM	First-In, First-Out Integrated Circuit Memory Device Utilizing A Dynamic Random Access Memory Array For Data Storage Implemented In Conjunction With An Associated Static Random
	-	•		Access Memory Cache
				Taylor
Pat. 6,172,927 (RAM 418 CIP2)	U.S.	03/24/2000	RAM	First-In, First-Out Integrated Circuit Memory Device Incorporating A Retransmit Function
		i	i i	



Pat. 6,141,281	U.S.	04/29/1998	EMS	Technique For Reducing Element Disable Fuse
(RAM 429)			*	Pitch Requirements In An Integrated Circuit Device Incorporating Replaceable Circuit Element
				Mobley, Ash
Pat. 6,055,192 (RAM 430)	U.S.	09/03/1998	EMS	Dynamic Random Access Memory Word Line Boost Technique Employing A Boost-On-Writes
(OTHE TOO)	. *	•		Policy
· .		· · · · · · · · · · · · · · · · · · ·		Mobley
Pet. 6,064,620 (RAM 432)	U.S.	07/08/1998	EMS	Multi-Array Memory Device, And Associated Method, Having Shared Decoder Circuitry
(101111432)				Mobley
Pat. 6,278,646	U.S.	03/23/2000	EMS	Multi-Array Memory Device And Associated Method Having Shared Decoder Circuitry
(RAM 432 CIP)		,		Mobiley
Pat. 5,963,481 (RAM 447)	U.S.	06/30/1998	EMS	Bribedded Enhanced DRAM And Associated Method
(Man 447)				Alwais, Peters
App. 99302956.0 (RAM 447 EPO)	Europe	04/16/1999	EMS	Embedded Enhanced DRAM And Associated Method
(KAIVI447 EPO)				Alwais, Peters
Pat. 6,249,840	U.S.	10/23/1998	EMS	Mnlti-Bank Esdram With Cross-Coupled SRAM Cache Registers
(RAM 448)		08		Peters
Pat. 6,330,636	U.S.	01/25/1999	EMS	Double Data Rate Synchronous Dynamic Random Access Memory Device Incorporating A Static
(RAM 450)	•	•		RAM Cache Per Memory Bank
~ 1				Bondurant, Peters, Mobley
Pat. 6,151,236	U.S.	02/29/2000	EMS	Enhanced Bus Turnaround Integrated Circuit Dynamic Random Access Memory Device
(RAM 460)				Dynamic Rantom Access Memory Device
-				Bondurant, Fisch, Grieshaber, Mobley, Peters
Pat. 6,301,183	U.S.	07/27/2000	EMS	Enhanced Bus Turnaround Integrated Circuit Dynamic Random Access Memory Device
(RAM 460 CON)	9.		, · · ·	Bondurant, Fisch, Grieshaber, Mobley, Peters
'App. 2001-052888	Japan	02/27/2001	EMS	Enhanced Bus Turnaround Integrated Circuit Dynamic Random Access Memory Device



Pat. 6,392,441 (RAM 461)	U.S.	06/13/2000	EMS	Fast Response Circuit Moscaluk
Pat. 6,373,751 (RAM 463)	U.S.	05/15/2000	EMS	Packet-Based Integrated Circuit Dynamic Random Access Memory Device Incorporating An On-Chip Row Register Cache To Reduce Data Access
				Latencies Bondurant
Pat. 6,549,472 (RAM 463 CON)	U.S.	02/21/2002	EMS	Packet-Based Integrated Circuit Dynamic Random Access Memory Device Incorporating An On-Chip Row Register Cache To Reduce Data Access Latencies
Pat. 6,646,928 (RAM 463 DIV)	U.S.	01/16/2003	EMS	Packet-Based Integrated Circuit Dynamic Random Access Memory Device Incorporating An On-Chip Row Register Cache To Reduce Data Access Latencies Bondurant
Pat. 6,501,698 (RAM 464)	U.S.	11/01/2000	EMS	Structure And Method For Hiding DRAM Cycle Time Behind A Burst Access Mobley
App. 09/828,283 (RAM 465)	U.S.	04/05/2001	EMS	Method For Hiding A Refresh In A Pseudo-Static Memory Mobley
Pat. 6,538,928 (RAM 468)	U.S.	10/11/2000	EMS.	Method For Reducing The Width Of A Global Data Bus In A Memory Architecture Mobley
App. 09/828,488 (RAM 487)	U.S.	04/05/2001	EMS	Method And Circuit For Increasing The Memory Access Speed Of An Enhanced Synchronous SDRAM
· · · · · · · · · · · · · · · · · · ·				. Peters
App. 10/782,386 (RAM 487 CON)	U.S.	02/18/2004	EMS	Method And Circuit For Increasing The Memory Access Speed Of An Enhanced Synchronous SDRAM
			<u>.</u>	Peters
App. 10/178,072 (RAM 491)	U.S.	06/20/2002	RAM	Method And Circuit For Increasing The Memory Access Speed Of An Enhanced Synchronous SDRAM
				Mobley, Peters, Schnette



Pat. 5,787,457	U.S.	10/18/1996	EMS	Cached Synchronous DRAM Architecture Allowing Concurrent DRAM Operations Miller, Rogers, Tomashot, Bondurant, Jones, Jr., Mobley
Pat. 6,289,413	U.S.	10/15/1999	EMS	Cached Synchronous DRAM Architecture Having A Mode Register Programmable Cache Policy Rogers, Tomashot, Bondurant, Jones, Jr., Mobley

Subject to the exceptions described on Exhibit C to the Patent Purchase Agreement by and between the parties dated as of April 13, 2004, Assignor represents, warrants and covenants that:
(i) it is the sole owner, assignee and holder of record title to the Patent Rights identified above, (ii) it has obtained and submitted for recordation previously executed assignments for all patent applications and patents identified above as necessary to fully perfect its rights and title therein in accordance with governing law and regulations in each respective jurisdiction, and (iii) it has full power and authority to make the present assignment.

Assignor further agrees to and hereby does sell, assign, transfer and convey unto Assignee all of its rights: (i) in and to causes of action and enforcement rights for the Patent Rights including all rights to pursue damages, injunctive relief and other remedies for past and future infringement of the Patent Rights, and (ii) to apply in any or all countries of the world for patents, certificates of invention or other governmental grants for the Patent Rights, including without limitation under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement or understanding. Assignor also hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents or certificates of invention which may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

Assignor will, at the reasonable request of Assignee and at Assignee's sole expense do all things necessary, proper, or advisable, including without limitation the execution, acknowledgment and recordation of specific assignments, oaths, declarations and other documents on a country-by-country basis, to assist Assignee in obtaining, perfecting, sustaining, and/or enforcing the Patent Rights. Such assistance shall include providing, and obtaining from the respective inventors, prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, powers of attorney, specifications, declarations or other papers and other assistance reasonably necessary for filing patent applications, complying with any duty of disclosure, and conducting prosecution, reexamination, reissue, interference or other priority proceedings, opposition proceedings, cancellation proceedings, public use proceedings, infringement or other court actions and the like with respect to the Patent Rights.

The terms and conditions of this Assignment shall inure to the benefit of Assignee, its successors, assigns and other legal representatives, and shall be binding upon Assignor, its successor, assigns and other legal representatives.



IN WITNESS WHEREOF this Assignment of I	Patent Rights is executed at Ray Haw
on April 13, 2004	×
RAMTRON INTERNATIONAL CORPORA	TION
Ву.	
Name: GREG Janis S	
Title: PLSINENT, EGH GP (Signature MUST be notarized)	
STATE OF COLORADO) ss.	**
COUNTY OF EL PASO	· ·
The foregoing instrument was acknowledged be	fore me on this /3 of from 2004, by
Delaware corporation.	of Ramtron International Corporation, a
	0
	Alah E- Noute
	Notary Public
My commission expires: 10-30-02	
[SEAL]	
ENHANCED MEMORY SYSTEMS, INC.	
By:	
	* * * * * * * * * * * * * * * * * * * *
Name: GREGA KONES	
Title: 1 1RSC102	
(Signature MUST be notarized)	
STATE OF COLORADO	
COUNTY OF EL PASO ss.	
The foregoing instrument was acknowledged before	ore me on this 13 of for 2004, by of Enhanced Memory Systems, Inc., a
Delaware corporation:	
	Whole Single
My commission expires: 10-30-02	Notary Public
[SEAL]	
IIDE - 10412/0161 - 204301 v2	, COPY